

Applicant: Williams et al.  
For: MOLECULAR RECOGNITION SENSOR SYSTEM

ABSTRACT OF THE DISCLOSURE

A molecular recognition sensor system for detecting the presence and concentration  
5 of an analyte including a resistive sensor having a semiconductive polymer film which  
swells when exposed to an analyte and interferents and a molecular imprinted resistive  
sensor having a semiconductive polymer film imprinted with the analyte which thereby  
swells when exposed to interferents, a circuit connected to the resistive sensor and the  
molecular imprinted resistive sensor for detecting a change in the resistance of the resistive  
10 sensor when exposed to the analyte and the interferents, the change in the resistance of the  
molecular imprinted resistive sensor when exposed to the analyte and interferents, and for  
subtracting the change in resistance of the molecular imprinted resistive sensor from the  
change in resistance of the resistive sensor to reduce the effect of any interferents on the  
change in resistance of the resistive sensor thereby determining the presence and  
15 concentration of the analyte.

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